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10/576,212	04/17/2006	Takashi Chosa	00862.109336.	7014

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EXAMINER	
TEJANO, DWIGHT ALEX C	
ART UNIT	PAPER NUMBER
2622	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,212	CHOSA ET AL.	
	Examiner	Art Unit	
	Dwight Alex C. Tejano	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5-12 and 20-76* is/are pending in the application.

4a) Of the above claim(s) *21-73* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5-12,20 and 74-76* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 July 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15 March 2010 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 5 – 12, 20, and 74 – 76 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claim 76 is objected to because of the following informalities: the claim should read "switching from an image capturing operation..." Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specifically, in light of the recent claim amendments, it is seemingly impossible that the limitations of claim 6 can always be true. Claim 5 reads that the "retrieving unit does not initiate a new retrieval" even though a new key image was captured in response to the shutter button. As such, then it should follow that a new retrieval is not necessarily started even if both the shutter and retrieval were simultaneously pressed. As long as a shutter button is pressed and a retrieval operation is not started, then this claim is not possible.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 - 12, 20, and 74 - 76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **claim 5**, the phrase "capable of" renders the claim(s) indefinite because the claim(s) include(s) elements that render the scope of the claim(s) unascertainable. Merely being "capable of" performing an action is not the same as

performing that action, in which case it is unclear whether or not the added language is intended for the limiting of the claim. See MPEP § 2173.05(d).

Claims 6 – 12, 20, and 74 – 76 inherit this issue and are thus rejected accordingly.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 8, 10, 20, and 74 – 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darrell, et al. (US 20050162523 A1) in view of Kubo (US 20010012064 A1.)

Regarding **claim 5**, Darrell, et al. (hereafter, "Darrell") discloses a digital camera (mobile deixis device, 10) comprising:

- A capturing unit (camera, 12) that captures a subject image (object, 90)
- A storing unit that stores the subject image captured by said capturing unit on a storage medium (storage medium, 32, must store the image in order for the rest of the processes to function)
- A retrieving unit that performs a retrieval operation of an image from the subject image stored on the storage medium (computer, 24, with

database, 25, that finds similar images from the image taken from the storage medium) [0021]

- Wherein said capturing unit captures a generic image to be retrieved or a key image to be used as a retrieval key of the retrieval operation according to the operation of a shutter button (after the shutter button is pressed, the camera, 12, captures an image {key image} which is then processed to find similar images {used as a retrieval key of the retrieval operation}) [0021, 0024]
- Wherein in the event the capturing unit captures a key image to be used as a retrieval key of the retrieval operation, the retrieving unit starts the retrieval operation using the key image (Fig. 2, similar images, 220, are produced in response to "snapping" an image, 210) [0025]

However, Darrell fails to disclose that the capturing unit is capable of capturing an image during the retrieval operation, where no new retrieval is initiated.

Despite this, the Examiner maintains that such operations would be obvious to try due to finite, predictable results, as taught by Kubo.

Kubo discloses a digital camera with a plurality of recording media that addresses each recording medium in parallel. Specifically, Kubo discloses that, while one recording medium is processing and saving, the camera functions for image capture are still available to the user to capture and save onto the other recording medium (Fig. 11, [0139.])

Given that parallel processing of access of a recording medium is suggested by Kubo so as to speed up image capture opportunities, it would be obvious to one of ordinary skill in the art to modify Darrell in such a way that images can be captured, even when a retrieval operation is taking place.

Specifically, when a retrieval operation is taking place, Darrell sends out a request to an external server to perform a retrieval operation of similar images (in Darrell's example, Google Image Search, [0030.]) However, there is an inherent delay between capture and retrieval – the user must compress and send the image to some recording medium on a remote server where it can be analyzed, so that relevant similar images are searched, found, retrieved and returned to the device. During this time period, the user is left simply waiting.

However, as Kubo suggests, it would be preferable to allow the user to continue capturing photos, while the other storage medium is being accessed (using Darrell's example, the Google Image servers) in order to minimize this wait time between operations. Therefore, it would be obvious to one of ordinary skill in the art to allow the user continue capturing an image during a retrieval operation, as this would allow the user to capture images in quick succession while processing the image retrieval in parallel.

Furthermore, because it is obvious that an image can be captured while image retrieval is occurring, it would further be obvious that the retrieving unit does not initiate a new retrieval operation using a new key image even though the capturing unit

captures the new key image in response to pressing the shutter button during the retrieval operation.

Specifically, because an image can be captured while image retrieval is already being performed, it would be obvious that another retrieval would not take place. There are only two, finite options in this case: 1) send a simultaneous request for image retrieval using the newly taken key image, or 2) prevent another request for image retrieval while the search is taking place.

Because the servers are already working on one search request, it would be preferable for to prevent a simultaneous request so as to minimize bandwidth use and ease the burden on the servers.

Therefore, given that there are a finite number of identifiable, predictable potential solutions, and given that, for the sake of bandwidth, the prevention of simultaneous requests are preferred, it would be obvious to one of ordinary skill in the art that the retrieving unit does not initiate a new retrieval operation using a new key image even though the capturing unit captures the new key image in response to pressing the shutter button during the retrieval operation.

Regarding **claim 8**, the combination discloses the digital camera of claim 5, and further Darrel discloses that the storing unit (storage medium, 32) stores the generic image to be retrieved (downloads and stores the plurality of similar images with associated hyperlinks from database to be shown to user, [0026]) and stores the key image to be used as a retrieval key of a retrieval operation on the identical storage

medium (storage medium, 32, also holds the image that was just captured and used as a key image for search.)

Regarding **claim 10**, the combination discloses the camera of claim 8, and further Darrell discloses that information different from file management information for the generic image is attached to file management information for the key image (the retrieved similar images also contain hyperlinks associated with each image, [0026.])

Regarding **claim 20**, the combination discloses the limitations of claim 5, and further Darrell discloses that the user designates an image specified as a key image (image captured for image retrieval, 210) or an image appearing from a retrieval result (images retrieved, 220) and presses a retrieval button ("selecting a thumbnail" must inherently have some user interaction) to cause said retrieving unit (computer, 24) to execute a retrieval operation again (retrieves source webpage, 230) with the designated image as a key image (selecting an image from the retrieval result, 220) [0028] (Fig. 5A.)

Regarding **claim 74**, the combination discloses the limitations of claim 5, and further Darrell discloses that the retrieving unit (computer, 24) searches for a generic image (any of the images retrieved, 220) similar to the key image from the storage medium (finds similar images from the image captured, 210) [0021] (Fig. 4A.)

Regarding **claims 75 and 76**, the combination discloses the limitations of claim 5, and further Darrell discloses a display unit (18a) wherein the display unit displays images retrieved by the retrieving unit during an/in response to a switch to image displaying operation mode (Fig. 2 shows the mode switch from 210 to 220, where after capture the display unit displays the retrieved images.)

Claims 5, 7 - 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teicher (US 20010032070 A1.) in view of Kubo.

Regarding **claim 5**, Teicher discloses a digital camera (camera, 1) comprising:

- A capturing unit (CCD, 4, controlled by control panel, 9, according to user-operated camera controls, 11) that captures a subject image (image shown on screen, 5)
- A storing unit that stores the subject image captured by said capturing unit on a storage medium (memory, 6) [0019]
- A retrieving unit that performs a retrieval operation of an image from the subject image stored on the storage medium (OCR, 13, and Translator, 14, extracts and retrieves translated text from the image stored in the memory) [0021]
- Wherein said capturing unit selectively captures a generic image to be retrieved [or] a key image to be used as a retrieval key of the retrieval operation according to the operation of a shutter button (after the shutter button is pressed on the camera controls, 11, the camera, 1, captures an

image on the CCD {generic image} as shown on screen, 5, and text is then selected and extracted through the control panel {capturing key image} to be used in a translation retrieval {used as a retrieval key of the retrieval operation}) [0019]

- Wherein in the event the capturing unit captures a key image to be used as a retrieval key of the retrieval operation, the retrieving unit starts the retrieval operation using the key image (the translation option is started in response to the selection of the text via the control panel) [0019]

However, Teicher fails to disclose that the capturing unit is capable of capturing an image during the retrieval operation, where no new retrieval is initiated.

Despite this, similar to the previous rejection to claim 5, the Examiner maintains that such operations would be obvious to try due to finite, predictable results, as taught by Kubo.

Kubo discloses a digital camera with a plurality of recording media that addresses each recording medium in parallel. Specifically, Kubo discloses that, while one recording medium is processing and saving, the camera functions for image capture are still available to the user to capture and save onto the other recording medium (Fig. 11, [0139.])

Given that parallel processing of access of a recording medium is suggested by Kubo so as to speed up image capture opportunities, it would be obvious to one of ordinary skill in the art to modify Darrell in such a way that images can be captured, even when a retrieval operation is taking place.

Specifically, when a retrieval operation is taking place, Teicher sends out a request to the OCR unit (13) and translation/dictionary unit (14) to perform a retrieval operation (in Teicher's example, a text OCR and language translation.) However, there is an inherent delay between capture and retrieval – the user must wait while the programs analyze the text, so that the proper characters are extracted, translated, and returned to the user. During this time period, the user is left simply waiting.

However, as Kubo suggests, it would be preferable to allow the user to continue capturing photos, while the other storage media are being accessed (in this case, the OCR and translation units) in order to minimize this wait time between operations. Therefore, it would be obvious to one of ordinary skill in the art to allow the user continue capturing an image during a retrieval operation, as this would allow the user to capture images in quick succession while processing the image retrieval in parallel.

Furthermore, because it is obvious that an image can be captured while image retrieval is occurring, it would further be obvious that the retrieving unit does not initiate a new retrieval operation using a new key image even though the capturing unit captures the new key image in response to pressing the shutter button during the retrieval operation.

Specifically, because an image can be captured while image retrieval is already being performed, it would be obvious that another retrieval would not take place. There are only two, finite options in this case: 1) send a simultaneous request for retrieval using the newly taken key image, or 2) prevent another request for retrieval while the search is taking place.

Because the device is already working on one request, it would be preferable for to prevent a simultaneous request so as to minimize the burden on the camera processor and to prevent overheating.

Therefore, given that there are a finite number of identifiable, predictable potential solutions, and given that, for the sake of not taxing the internal processor, the prevention of simultaneous requests are preferred, it would be obvious to one of ordinary skill in the art that the retrieving unit does not initiate a new retrieval operation using a new key image even though the capturing unit captures the new key image in response to pressing the shutter button during the retrieval operation.

Regarding **claim 7**, the combination discloses the digital camera of claim 5, and further Teicher discloses that the capturing unit (CCD, 4, and control panel, 9) captures the key image in a mode other than an imaging mode (cursor control selection mode, [0019]) said retrieving unit starts the retrieval operation using the key image (key image selection begins the translation retrieval process) [0019.]

Regarding **claim 8**, the combination discloses the digital camera of claim 5, and further Teicher discloses that the storing unit stores the generic image to be retrieved on the storage medium and stores the key image to be used as a retrieval key of a retrieval operation on the identical storage medium (memory, 6, holds both current image memory {selected key image section} and the images previously taken {generic.})

Regarding **claim 9**, the combination discloses the digital camera of claim 8, and further Teicher discloses that the storing areas (current image memory, 7, and image storage memory, 8) for the generic image and for the key image in the storage medium are separated.

Regarding **claim 11**, the combination discloses the digital camera of claim 8, and further Teicher discloses that, in storing the key image on the storage medium, the key image is stored after compression or curtailment of the image subject image is performed. Specifically, Teicher discloses that the key image (text extracted section of the image) is retrieved and stored. Because this extraction is an extracted portion of the total subject image, it is an inherent "curtailment" of the image subject image.

Regarding **claim 12**, the combination discloses the digital camera of claim 8, and further Teicher discloses that the key image stored on the storage medium is copied, changed, or linked to the generic image. Specifically, the key image, being a section of the total generic image, is inherently "linked to" the generic image.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teicher in view of Kubo and further in view of Misawa (US 2002/0180873 A1.)

Regarding **claims 6**, the combination meets the limitations of claim 5, as discussed previously. However, the combination fails to disclose the capturing of a key image by pressing a shutter button and a retrieval button simultaneously and instigating

a retrieval operation as a result, as disclosed in the instant application. Despite this, the Examiner maintains that the use of simultaneous button presses to execute actions was well known in the art, as disclosed by Misawa.

Within the same digital camera art, Misawa discloses an imaging apparatus that includes a storing operation that is instigated by simultaneously pressing the menu, execute, and the shutter buttons [0044.] Misawa further discloses that this simultaneous pressing is required so that the user does not easily enter into the storing operation when storing is not desired.

Because the invention disclosed in Teicher is involved with extracting and translating image text, it would be obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings Misawa and Teicher. Functionally, it would be fairly simple to map the "execute" and "shutter" buttons of Misawa to the "Translate" and "Shutter" buttons that are already present in Teicher.

More importantly, however, Misawa's multiple button press would require that user consciously designate a section to be translated (set as a key image) that starts the retrieval process in Teicher's system, thereby preventing unnecessary space in the memory card from being taken up when such is not desired.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwight Alex C. Tejano whose telephone number is (571)

270-7200. The examiner can normally be reached on Monday through Friday 10:00-6:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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